# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

#### MONITORING AND REPORTING PROGRAM NO.

# FOR CLAYTON REGENCY LLC CLAYTON REGENCY MOBILE HOME PARK CONTRA COSTA COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring treated wastewater, subsurface disposal areas, groundwater, and biosolids. This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form.

Field test instruments (such as those used to test pH and electrical conductivity) may be used provided that:

- 1. The user is trained in proper use and maintenance of the instruments;
- 2. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
- 3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
- 4. Field calibration reports are submitted as described in the "Reporting" section of this MRP.

### WASTEWATER MONITORING

Wastewater samples shall be obtained from the wastewater treatment system effluent pump tank or a sampling port in the pipeline connecting the wastewater treatment system to the subsurface disposal areas. At a minimum, the Discharger shall perform wastewater monitoring as follows:

Constituent	<u>Units</u>	Type of Sample	Sampling <u>Frequency</u>	Reporting <u>Frequency</u>
Flow	gpd	Meter reading	Continuous	Monthly
BOD	mg/L	Grab	Weekly	Monthly
TSS	mg/L	Grab	Weekly	Monthly
TDS	mg/L	Grab	Weekly	Monthly
Total coliform organisms <sup>1</sup>	MPN/100mL	Grab	Weekly	Monthly
Nitrate nitrogen	mg/L	Grab	Monthly	Monthly

Constituent	<u>Units</u>	Type of Sample	Sampling <u>Frequency</u>	Reporting Frequency
Ammonia nitrogen	mg/L	Grab	Monthly	Monthly
Total Kjeldahl nitrogen	mg/L	Grab	Monthly	Monthly
pH	Std. units	Grab	Monthly	Monthly

Samples shall be analyzed using a minimum of 15 tubes or three dilutions.

#### SUBSURFACE DISPOSAL AREA MONITORING

The Discharger shall conduct a **weekly** visual inspection of all three leachfields. Evidence of surfacing wastewater, erosion, field saturation, runoff, or the presence of nuisance conditions shall be noted in the report. If surfacing water is found, then a sample shall be collected and tested for total coliform organisms and total dissolved solids. In addition to the visual inspections, monitoring of the leachfields shall include the following:

<u>Parameter</u>	<u>Units</u>	Type of Sample	Sampling Frequency	Reporting <u>Frequency</u>
Effluent depth <sup>1</sup>	Inches	Measurement Meter	Quarterly	Quarterly <sup>2</sup>
Flow to each leachfield <sup>3</sup>	gpd	Observation	Daily	Monthly

Measure the depth to any ponded wastewater in each inspection riser. The Discharger shall provide the depth of the ponded wastewater for each at-grade mound and leaching trench (when used).

#### **GROUNDWATER MONITORING**

Beginning upon adoption of this Order, the Discharger shall establish a quarterly groundwater sampling schedule with samples obtained approximately every three months. All wells shall be sampled and analyzed according to the schedule below.

Prior to construction of any new groundwater monitoring wells, the Discharger shall submit plans and specifications to the Regional Board for review and approval. Once installed, all new wells shall be added to the MRP and shall be sampled and analyzed according to the schedule below.

Prior to sampling, the groundwater elevation shall be measured in each well, and the wells shall be purged of at least three casing volumes until temperature, pH and electrical conductivity have stabilized. Depth to groundwater shall be measured to the nearest 0.01 feet. Samples shall be collected and analyzed using standard EPA methods. Groundwater monitoring shall include, at a

Results shall be reported in the monthly monitoring report for month during which monitoring occurs.

Pumped flow to Parcel A and Upper Leachfield mound systems.

minimum, the following:

		Type of	Sampling	Reporting
<u>Constituent</u>	<u>Units</u>	<u>Sample</u>	<u>Frequency</u>	<u>Frequency</u>
Depth to groundwater	0.01 feet	Measurement	Quarterly	Quarterly
Groundwater elevation <sup>1</sup>	0.01 feet	Calculated	Quarterly	Quarterly
Gradient	feet/feet	Calculated	Quarterly	Quarterly
Gradient direction	Degrees	Calculated	Quarterly	Quarterly
Total dissolved solids	mg/L	Grab	Quarterly	Quarterly
Electrical conductivity	umhos/cm	Grab	Quarterly	Quarterly
Nitrate nitrogen	mg/L	Grab	Quarterly	Quarterly
Ammonia nitrogen	mg/L	Grab	Quarterly	Quarterly
рН	standard	Grab	Quarterly	Quarterly
Total coliform organisms	MPN/100 ml	Grab	Quarterly	Quarterly
Standard minerals <sup>2</sup>	mg/L	Grab	Annually	Annually

Groundwater elevation shall be determined based on depth-to-water measurements using a surveyed measuring point elevation on the well and a surveyed reference elevation.

## **BIOSOLIDS MONITORING**

When sludge (biosolids) is removed from the treatment system for disposal, sampling and analysis shall be performed as required to comply with the requirements of the US EPA and the disposal facility. Sludge sampling and analysis records shall be retained for a minimum of five years. Records of sludge quantities generated, and all handling and disposal activities shall be included in the Annual Monitoring Reports.

#### REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, pond, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Regional Board.

Standard Minerals shall include, at a minimum, the following elements/compounds: boron, calcium, chloride, iron, magnesium, manganese, potassium, sodium, sulfate, total alkalinity (including alkalinity series), and hardness. Analytical methods shall be selected to provide reporting limits below the Water Quality Limit for each constituent.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all Groundwater Monitoring Reports shall be prepared under the direct supervision of a Registered Engineer or Geologist and signed and stamped by the registered professional.

# A. Monthly Monitoring Reports

All daily, weekly, and monthly monitoring data shall be reported in monthly monitoring reports. Monthly reports shall be submitted to the Regional Board on the **1**<sup>st</sup> day of the second month following sampling (i.e. the January Report is due by 1 March). At a minimum, the reports shall include:

- 1. Results of wastewater and subsurface disposal area monitoring;
- 2. A comparison of monitoring data to the discharge specifications and effluent limitations and an explanation of any violation of those requirements. Data shall be presented in tabular format;
- 3. Copies of all laboratory analytical report(s); and
- 4. A calibration log verifying calibration of all hand-held monitoring instruments and devices used to comply with the prescribed monitoring program.

# **B.** Quarterly Monitoring Reports

Quarterly monitoring reports shall be submitted to the Regional Board by the **1**<sup>st</sup> **day of the second month after the quarter** (i.e. the January-March quarterly report is due by May 1<sup>st</sup>) and may be combined with the monthly report. The Quarterly Report shall include the following:

- 1. Results of groundwater monitoring for all groundwater sampling activities during the quarter;
- 2. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for the groundwater monitoring. The narrative shall be sufficiently detailed to verify compliance with the WDRs, this MRP, and the Standard Provisions and Reporting Requirements. The narrative shall be supported by field logs for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of casing volume; and total volume of water purged;
- 3. Calculation of groundwater elevations, an assessment of groundwater flow direction and gradient on the date(s) of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends if any;
- 4. A narrative discussion of the analytical results for all groundwater locations monitored including spatial and temporal tends, with reference to summary data tables, graphs, and appended analytical reports (as applicable);

- 5. A comparison of monitoring data to the groundwater limitations and an explanation of any violation of those requirements;
- 6. Summary data tables of historical and current water table elevations and analytical results;
- 7. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to mean sea level datum:
- 8. Copies of laboratory analytical report(s) for groundwater monitoring.

# C. Annual Report

Beginning in **February 2006**, an Annual Report shall be prepared and submitted to the Regional Board by **1 February** each year. The Annual Report shall include all monitoring data required in the monthly/quarterly schedule. In addition, the Annual Report shall include the following:

- 1. The contents of the regular groundwater monitoring report for the last quarter of the year;
- 2. Tabular and graphical summaries of all groundwater monitoring data collected during the year and quarterly groundwater elevation contour maps;
- 3. An intrawell statistical analysis of each groundwater monitoring parameter for each well; time versus concentration plots for each constituent for each well, and comparison to the established background groundwater concentrations;
- 4. A discussion of compliance and the corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements;
- 5. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program;
- 6. The results for analyses that are performed annually (as set forth above);
- 7. A summary of information on the management and disposal of biosolids;
- 8. The results from any analytical testing performed to characterize the biosolids prior to off-site disposal;
- 9. A forecast of influent flows for the coming year, as described in Standard Provision No. E.4; and
- 10. The name and contact information for the certified wastewater operator responsible for operation, maintenance, and system monitoring.

A letter transmitting the self-monitoring reports shall accompany each report. The letter shall include a discussion of requirement violations found during the reporting period, and actions

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taken or planned for correcting noted violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain the penalty of perjury statement by the Discharger, or the Discharger's authorized agent, as described in the Standard Provisions General Reporting Requirements Section B.3.

The Discharger shall implement the above monitoring program as of the date of this Order.

	Ordered by:	THOMAS R. PINKOS, Executive Officer
AT 0.10// 0005		(Date)

ALO:10/6/2005